Horndean & District Amateur Radio Club Journal

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Map Room Visit.

Horndean & District Amateur Radio Club
Founded in 1975

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Contents

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I use Microsoft Publisher to produce the journal so am happy to accept articles/photographs via email. A Word document or Picture attachment. Just use Journal article or Journal picture as the subject matter.

Opinions expressed in the journal are not necessarily those of the HDARC. The editor has the right to reproduce the articles for our affiliated club journals/ newsletters. The Editor decision is always final.

Closing date for next journal is : July 6th

Editorial

Hi All,

May I start with saying a big thank you to Sean for all his hard work as Journal editor, as you may be aware he was hoping to complete his fiftieth edition but sadly due to computer problems my time to take over has come a little earlier than expected.

Apologies in advance if a few errors have crept in; I hope with time to try and come close to Sean's polished efforts.

Now the weather has finally started to warm up, more of you may be starting to think about getting out and working portable from some of the fantastic locations we have on our door steps.

This may be an opportunity to combine a number of things. Make yourself a portable antenna, this you could enter into this year's project and on the 28th and 29th July we have the RSGB's IOTA contest. Great fun even for the non-contester (see page 15).

Anyone having a go let me know how you got on and maybe we can put together how it went for everyone in the next edition? If anyone has any ideas or things that you want included in the Journal please let me know.

73
Mike. M0ZDZ / G7Y
Journal Editor HDARC (Trainee :)

Club visit to the Map Room at Southwick House

On Friday March 30th (Good Friday) the club was fortunate to be able to visit the map room, located in Southwick House. Thank you to Bill 2EØWGK, and Julia GØIUY for organising the visit, which was attended by 17 club members and guests. We were met by Wing Commander Martin Bland, who is Bill's boss. The talk was given by Willie Dick (ex-RN), and afterwards we visited the Military Police museum on another part of the tri-Service Defence College of Policing and Guarding site.

The house became important during World War II. In 1940 the estate owners allowed the Royal Navy to use the house to accommodate overnight pupils of the Royal Navy School of Navigation, HMS Dryad in Portsmouth Naval Dockyard. In 1941, after heavy bombing of the dockyard, the house was requisitioned and became the new home of HMS Dryad. In 1943, with the planning for D-Day already underway, the house was chosen to be the location of the advance command post of the Supreme Headquarters Allied Expeditionary Force. Because of this, HMS Dryad was moved out of the house onto further land requisitioned from the estate. In 1944, in the months leading up to D-Day, the house became the headquarters of the main allied commanders, including Naval Commander-in-Chief Admiral Ramsay, Allied Supreme Commander General Eisenhower and Army Commander-in-Chief General Montgomery.

Willie gave us a detailed chronological account of the events leading up to D-Day and the events that followed the landing in France on June 6th 1944. Each of the five beaches (Utah, Omaha, Gold, Juno and Sword) were spoken about to demonstrate their function, and sometimes shortcoming, on D-Day and the days that followed. A great talk, and for those that missed the visit, there may be another opportunity later in the year.

Photo of the map by GØFYX, and that of Willie Dick by G3LIK.

History and Language

Is it all a load of codswallop?

On March 16th, Bryan Jerrard from Portchester visited the club to give us an interesting, informative and amusing talk with the above title. Bryan said that his talk would be about an exploration of language and how it has been influenced by history.

Radio was the first word he discussed. Radio comes from the Latin “radius” – a spoke of the wheel or a beam of light. In 1881 the word was adapted from a French suggestion to Alexander Graham Bell, who adopted radiophone: “a radiated sound”. In 1898 the British Practical Engineer journal used the word “wireless”, and in 1904 the British Post Office used “radio” rather than “wireless”.

Bryan has collected many books about language, and mentioned a few, such as To Coin a Phrase by Edwin Radford, Our Language by Simeon Potter, Bloomers, Biros and Wellington Boots (How the names became the words) by Andrew Sholl, Sticklers, Sideburns and Bikinis (The military origins of everyday words and phrases) by Graeme Donald, Torrist’s dictionary of eponymists, Codswallop, Crumpet and Caper (Words and where they came from) by Edward Allhusen, Dictionary of Historical Allusions and Eponyms by Dorothy Auchter, Planet Word (The story of language from the earliest grunts to Twitter and beyond) by J P Davidson, The Reverend Guppy's Aquarium: Encounters with heroes of the English language, from the Earl of Sandwich to Joseph P. Frisbie, Balderdash & Piffle (English words and their curious origins) by Alex Games with a foreword by Victoria Coren (seen on BBC2 in Only Connect), and finally the book that Bryan praised most of all was The Adventure of English (The biography of a language) by Melvyn Bragg.

The next word to be mentioned was codswallop. The story goes that a man by the name of Hiram Codd patented a bottle for fizzy drinks with a marble in the neck, which kept the bottle shut by pressure of the gas until it was pressed inwards. Wallop was a slang term for beer, and Codd's wallop came to be used by beer drinkers as a derogatory term for weak or gassy beer, or for soft drinks.

The Woolsack is the seat of the Lord Speaker in the House of Lords, the Upper House of the Parliament of the United Kingdom. In the 14th century King Edward III (1327–1377) commanded that his Lord Chancellor whilst in council should sit on a wool bale, now known as "The Woolsack", in order to symbolise the central nature and huge importance of the wool trade to the economy of England in the Middle Ages.

Fabrics and place names
Worsted from a village (Worstead) in Norfolk where the cloth was originally woven.
Muslin, a cotton fabric, derived from Mosul in Iraq, where the cloth may have been originally manufactured.
Calico is a cotton fabric, originally from the city of Calicut in southwestern India.
The Balaclava headwear comes from their use at the Battle of Balaclava during the Crimean War, referring to the town near Sevastopol in the Crimea. British troops there wore knitted headgear, to keep warm.
Denim is derived from the town of Nimes in southern France.

Now a quiz for you. Can you name the country or language of origin for the following words:
quisling, mazurka, ombudsman, studio, coleslaw, pogrom, dodo, Semtex, bagel, guerrilla, magazine, lieutenant, geyser, tycoon, admiral.
Answers are on page 21 of this journal.

Pictures of some flowers were shown, and an explanation of how they got their names was given:
For example, Camellia - The genus was named by Linnaeus after the Jesuit botanist Georg Joseph Kamel, who worked in the Philippines.

Delphinium - The genus name Delphinium derives from the ancient Greek word δελφίνιον (delphínion), meaning "larkspur". The name "delphinium" also derives from the Latin for "dolphin", referring to the shape of the nectary.

Freesia - Freesia is a genus of herbaceous perennial flowering plants in the family Iridaceae, first described as a genus in 1866 by Chr. Fr. Echlon (1795-1868) and named after German botanist and doctor Friedrich Freese (1794-1878).

Hosta - The genus was named by Austrian botanist Leopold Trattinnick in 1812, in honour of the Austrian botanist Nicholas Thomas Host.

Dahlia - The national flower of Mexico, is named in honour of Andreas Dahl (1751–89), Swedish botanist.

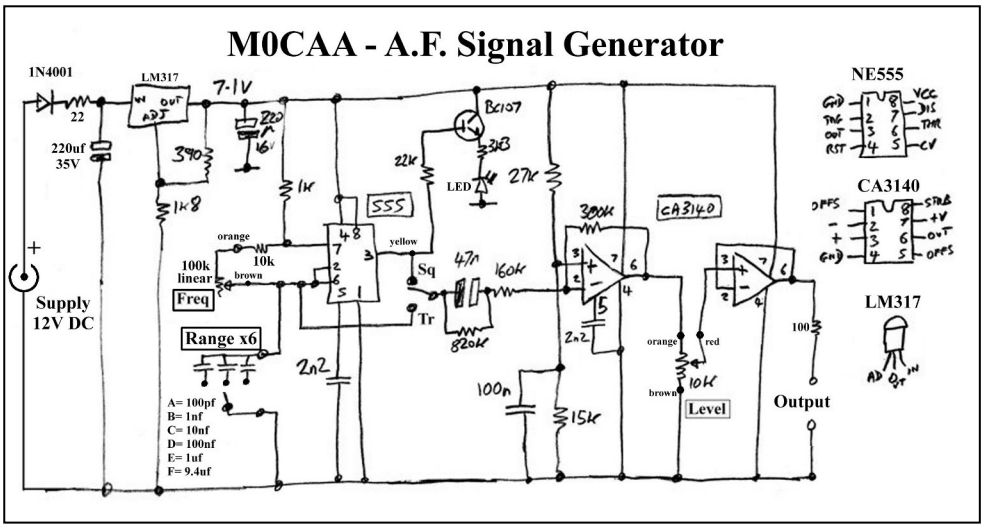
Some authors who invented new words were Shakespeare, Thomas Nashe, Jane Austen and Charles Dickens. Some new words added to the Oxford English Dictionary in 2018 are Smittling, Northern flicker, Mansplain, Blench, Hazzled.
Thanks to Mick G3LIK for the photo; text by Stuart G0FYX

CAA MAKES WAVES - SLOWLY!

Yes CAA's at it again with another half baked idea built from scrap and costing nothing!

A while back I needed a source of quality audio sine waves so I built a Wien Bridge variable frequency AF oscillator (it's on my web site if you follow the club links). It even made it into a box! I used a ancient RA53 evacuated thermistor to control the output level. It worked and enabled me to do the job but took a long time to stabilise at lower frequencies, the output level going up and down like a mini with busted shock absorbers, which was annoying.

My oscilloscope has developed a time base fault and I needed a signal source with a good range and that I could calibrate for frequency and level. I also wanted square and triangle wave outputs. So a quick and dirty design was put together from the junk box using that horrid old favourite the NE555 timer. You could use a ICL8038 function generator or even a DDS but I didn't have those and this is way more fun.



POWER.
Power from a 'wall wart' (10 to 16v DC) is regulated by an LM317 regulator. This is because to get 5V peak to peak output from the ancient CA3140, 3.5MHz bandwidth operational amplifiers I found in the junk box, I needed 2 volts more headroom, hence the 7V supply (a modern rail to rail op amp would be better).
The LM317 is a useful 3 terminal regulator which will work from 5 to 30V with a drop-out of around 3V. The output is set by 2 resistor values;

V out = 1.25 * (1 + R1/R2) - So; 1.25*(1* 1800/390)= 7.02V

PROBLEMS, PROBLEMS.
So the actual output is nearer 7.1V. This is due to tolerances of the resistors and the LM317. It always amuses me that having carefully designed an electronic project it often doesn't quite work as expected. Perhaps it's just me, mind you TSB's computer staff aren't having a good day either! Watch out if you use plug-in 'bread boards' to prototype, with high impedance or RF stuff, there's a lot of metal in those things.

THINGS THAT GO BUMP IN THE NIGHT.
The LM555 timer is set up as a classic a stable multi-vibrator, as per its data sheet. The 100k variable resistor has a 10k resistor in series with it so even at zero it gives a good mark/space ratio of around 50% with R1 set at 1k.

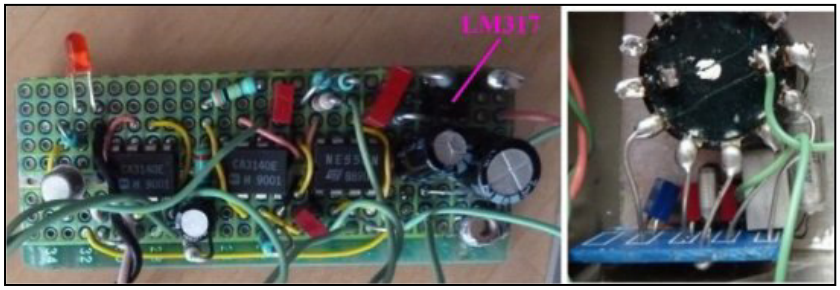
LET THERE BE LIGHT!
The square wave output is fed via a high resistance to a switching transistor operating an LED to give a visual indication that the unit is on and the frequency at low rates.

TOBLERONE AND BUMPY STUFF.
The voltage across the capacitor ramps up and down as it's charged and discharged and is approximately a triangular wave. It starts at around 1/3 V and stops at around 2/3 V so isn't very useful as a calibrated output. To overcome this the output is fed into an op amp with a gain of 2 and a DC offset. A high value capacitor is used to couple the signal to preserve the DC offset. This gives an output that starts at zero and reaches 4.6V at the peak. When switched to square wave the output is driven below zero but as there's no negative supply rail the output stops at zero and goes to 5V at the peak. The high value resistor across the capacitor is to discharge any DC offset caused by any non linearity in the waveform.

The frequency is pulled slightly in the triangle position by the loading on the timing capacitor.

UPPY DOWNY CONTROL.
The signal is fed to a potentiometer to allow the output level to be adjusted and then a gain of one buffer to give a low output impedance. The 100 ohm resistor limits the current and prevents damage if the output is shorted.

BLIMEY IT'S IN A BOX!
I re-used a box from the previous project and point-to-point wired the circuit on a strip of Veroboard. I used a recycled audio jack socket for the output.



The front panel label was made by scanning the front of the box, then using a drawing package to trace round the holes and add the text. It was printed out, covered with Sellotape to protect it, then cut out with a Stanley knife and double-sided taped to the box. Makes for a nice looking project.

CALIBRATION - WELL NOT VERY
From the LM555 data sheet the frequency is given by;
Frequency = 1 .44 / (R1 + 2*R2) * C
A six-position switch allows 6 capacitors each 10 times larger to be placed in circuit starting at 100pf. The biggest being made up of two 4.7uf tantalum caps in parallel to give 9.4uf for range 'F'.

So you'd expect the maximum frequency range (A) to be with the smallest capacitor.
So; C = 100pf, R1 = 1k, R2 = 110k (min F) to 10k (max F)
Minimum Freq = 1.44 / (1k + 220k) * 100pf = 65.2 kHz
Maximum Freq = 1.44 / (1k + 20k) * 100pf = 686 kHz

And the minimum frequency range (F) with the largest capacitor
So; C = 9.4uf, R1 = 1k, R2 = 110k (min) to 10k (max)
Minimum Freq = 1.44 / (1k + 220k) * 9.4uf = 0.69 Hz
Maximum Freq = 1.44 / (1k + 20k) * 9.4uf = 7.3 Hz

Here's what I actually got for square wave (pot calibrated 0 to 10);

Freq	A (kHz)	B (kHz)	C (kHz)	D (Hz)	E (Hz)	F (Hz)
0	53	6.78	0.653	63.1	7	0.7
1	56.4	7.25	0.701	67.7	7	0.7
2	61.5	7.99	0.771	74.8	7.4	0.8
3	68	8.96	0.87	84.5	8.3	0.9
4	75.4	10.14	0.987	96	9.5	1
5	87.2	12.1	1.18	115	11.3	1.3
6	103.5	14.8	1.47	143	14.2	1.5
7	125.4	19.01	1.9	182	18	2
8	158.4	25.7	2.54	249	24.7	2.6
9	222.9	40	4.1	405	39	4.1
10	266.1	59.4	6.56	652	63.5	6.9

The high frequency end is miles off the calculation, not surprising as we are above the spec limit for the NE555 and stray capacitance will be a problem, but still a useful range. Not sure why the top end stops short of the calculated value but it wasn't a problem and I wanted to use it.

All the best and happy hacking - Mike CAA & Sue BOZ

Using Winlog 32

Introduction Winlog32 is an excellent general purpose logging tool created by Colin Morris, G0CUZ. The software is designed for use on all Microsoft Windows platforms (including Windows 95, 98, ME, NT4, 2000, XP, Vista, Windows 7 and Windows 8 & 10) so will be equally at home on the latest generation of PCs as well as on that old laptop that you picked up for a song on Ebay!

Winlog32 has been under continuous development for many years and is well supported and regularly updated by its author. The software is highly intuitive and offers a number of powerful features. Colin provides this software for free use by all Radio Amateurs and SWL's in what he describes as “the true Ham Spirit”.

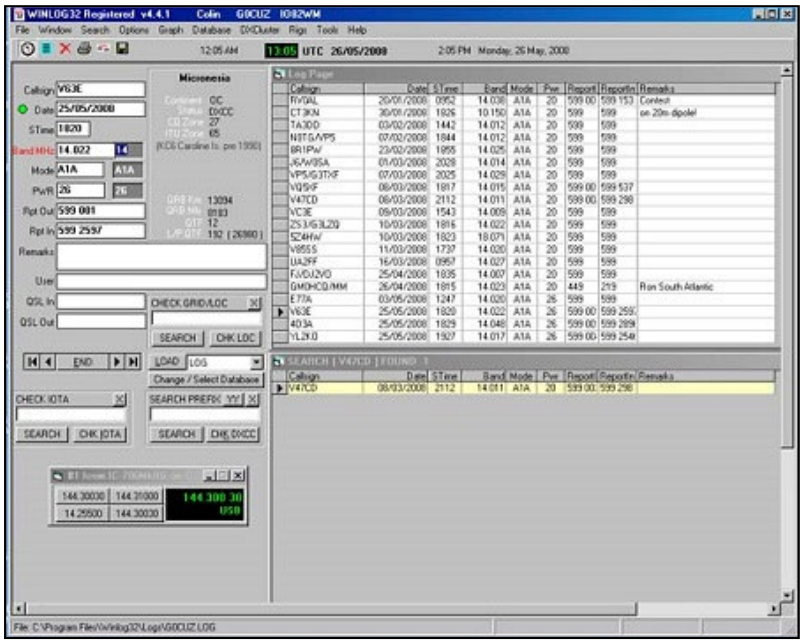
Although Winlog32 is general purpose logging software, it has a definite slant towards DX'ing (on both HF and VHF) with comprehensive tracking of various awards programs like DXCC, IOTA, WAZ etc. Winlog32’s use for contest logging is somewhat limited but the author has concentrated more on providing the features you would expect from general purpose logging and DX’ing software. Winlog32 also offers plenty of QSL support – a feature that could be quite useful if you just happen to be a card collector.

Winlog32 is free to download (go to www.winlog32.co.uk to download a copy) and it can be used without loss of functionality and without limitations of any kind when unregistered. The software is reasonably intuitive and it uses an efficient and uncluttered user interface. Colin has also provided a useful Help system. The program may also be freely distributed on a one-to-one basis, providing all original files are intact and not modified in any way and that no charge is made for them. If you need help with installing and using the software Colin has included a handy on-line help system.

Entering the QSO date and time.

Winlog32 provides an Auto-Date/Time option for ‘real time’ logging, (the indicator to the right of ‘Date’ will show green when this feature has been enabled). The Auto-Date/Time facility will insert the current date and time into the log automatically when the first characters are entered into the call sign field (see below). Note that the System Date/Time must be set accurately and 24hr format selected. UTC offset is automatic based on system settings. Alternatively a manual offset from local time can be added (see Menu/Options/Time/UTC offset).

The date format in Winlog32 is dependent to some extent on system date. Normal format of DD/MM/YY can be changed to any regular date format however it is recommended that the format should be set to reflect that used in Windows/Control Panel 'Regional Settings'. When adding/editing the date (Auto DATE OFF), the date must be entered in the format that your own system date requires.



For non-automatic date/time entries with Auto DATE OFF (when updating the log from existing data) the 'Keep Date Current' from Menu/Options/Date will maintain the date already entered in the date field for subsequently entered QSOs. The Auto-Date/Time function should be disabled when using manual date entry, Toolbar/Auto Date/Time function.

Entering the QSO date and time.

Winlog32 provides an Auto-Date/Time option for 'real time' logging, (the indicator to the right of 'Date' will show green when this has been enabled).
The Auto-Date/Time facility will insert the current date (and time) into the log automatically when the first characters are entered into the Call sign field. Note that the System Date/Time must be set accurately and 24hr format selected. UTC offset is automatic based on system settings. Alternatively a manual offset from local time can be added (see Menu/Options/Time/UTC offset).

Note that editing the date or time will require the Toolbar/Auto Date/Time function to be turned off. If a number of QSOs are to be entered on same date the Menu/ Options/Date/'Keep current date' option can be enabled. Note that if there is a date already entered into 'Date' then the Auto Date/Time option will NOT overwrite it. The F12 key can be used to update the log Date/Time. Finally, the QSO end time will be entered when END button is pressed at end of QSO.

Entering the QSO frequency

The frequency band or exact frequency must be entered numerically (i.e. not 2m 15m, 20m etc.) The band is selected from the 'Band List'. When the band is selected from the list with the keyboard up/down arrow keys, it is added to the log using the ENTER key. If the 'Band' entry box has already a value then change will only occur when entering a new QSO. Using the 'Band List Box' (when selected) you can easily cycle through the bands with the up/down arrow keys. The 'Allow kHz' option must be enabled if you want to enter the full frequency using the ENTER key, if this option is 'OFF' then the RETURN key will only enter the frequency band and no opportunity will be allowed to enter full frequency.

Entering the mode.

The mode is selected from the 'Mode List Box'. When a mode is selected from the 'Mode List Box', it is added to the 'Mode' entry box using the ENTER key. If the 'Mode' box has already a value then no change will take place unless the 'Mode List Box' is selected and a new QSO is being entered. In this case you simply need to cycle through the modes using the up/down arrow keys. If necessary you can edit modes that have already been entered manually. Here is a list of some of the most common modes: · A1a CW · J3e SSB · F3e FM · A3e AM · F2b RTTY/ AMTOR (FM TX) · J2b RTTY/AMTOR (SSB TX) · F2d Packet/Data (FM TX) · J2d Packet/Data (SSB TX) · J2f SSTV (SSB TX) · F2f SSTV (FM TX) · J2c FAX (SSB TX) · F2c FAX (FM TX)

Entering the power level.

Power (in Decibels or Watts) can be selected from the 'DBW List' with the up/ down arrow keys or alternatively the power level can be entered manually. Winlog32 is initialised with default dBW values for U.K. use, e.g. 10, 16, 20, 26. Different power levels appear for first-time non-U.K. use. Note that 20 dBW is equivalent to 100W. When 'DBW' is selected from the list with the up/down arrow keys, it is added to the 'DBW' entry box by the ENTER key. If the Power box has already a value then no change will take place, unless the 'DBW List Box' is selected, you can cycle through the list with the up/down arrow keys to change the dBW value already entered. If necessary, Edit mode can be used to change this value manually. For reference here is a list of commonly used power levels: · 10dbW 10W · 13dbW 20W · 16dbW 40W · 20dbW 100W · 26dbW 400W .

Entering signal reports

The signal report (RS or RST) sent is generated automatically whenever the 'Speed Log' and 'Auto RST (59) or (599)' have been enabled. Alternatively, you can employ keystroke entry using the control key along with a number pad key, for example: · Ctrl + 7 enters 57 (579 if in CW mode) · Ctrl + 8 enters 58 (589 if in CW mode) · Ctrl + 9 enters 59 (599 if in CW mode) · etc.

Similarly, the signal report (RS or RST) received is generated automatically whenever the 'Speed Log' and 'Auto RST (59) or (599)' have been enabled. Alternatively, you can employ keystroke entry using the Ctrl key along with a number pad key, as shown previously.

Note that if no report is entered in 'Report in (No QSO?)' the Log Check Robot will skip this entry unless the option in the robot 'ignore zero reports' is enabled. Thus it is important to either ensure that a received signal report is entered for each QSO or enable the 'Speed Log' facility from the dropdown menu.

Entering name/QTH information

If you wish to record operator name and QTH information you should make use of the 'User' field. Note that it is inadvisable to use a comma in 'Remarks' (or any other log text entries for that matter!) as this can adversely affect text exporting which uses the comma character as the field delimiter.

Entering remarks

Winlog32 provides a 'smart' field that permits the use of key words for future searches and for updating the many databases supported by Winlog32. The facility can also be used for generating reports from searches, i.e., 'IOTA', 'WAB', 'QSL via' etc. The same precaution concerning the use of commas applies to this field also. Exchange of data with a radio In common with most modern radio software, Winlog32 provides a means of importing data from a supported and suitably equipped radio. Various configuration options are provided for radios from different manufacturers. In this eventuality the logging burden should be considerably reduced as some fields (e.g. frequency/frequency band) will become automatically populated and there will then be no need for manual entry of this information.

In conclusion Colin Morris is to be congratulated for providing this excellent software package and releasing it to the Amateur Radio community. If you find the software useful and intend to use it on a regular basis the best way of saying 'thank you' is to register the software (for a very nominal fee) and help support its future development - good luck with using Winlog32!

RSGB IOTA Contest

The RSGB IOTA Contest, using the Islands on the Air concept, was created in 1993. This is now a major international event, attracting thousands of participants from all over the world. Radio Amateurs will be travelling to islands around the globe, and putting them on the air, making contacts with other islands and with those who are chasing islands.

Contest bands are 80m, 40m, 20m, 15m and 10m, both CW and SSB. ***28th & 29 July 2018*** The duration is 24 hours, starting at 12:00 UTC on Saturday (1 p.m. UK time). Stations send a signal report and serial number, with stations on islands sending their IOTA reference number, described below. The UK mainland (England, Wales and Scotland) is EU005, while Ireland (the Republic and Northern Ireland) is EU115. Other island references can be found by querying with "Search" at www.rsgbiota.org.

The IOTA Contest is based on the RSGB Islands on the Air awards programme which recently celebrated its 50th anniversary. The IOTA idea was conceived in 1964 by British short wave listener Geoff Watts (SK), who imagined that those of us who live in crowded cities would love to set up a station on a sunny beach among palm trees. This prospect is appealing to Radio Amateurs, even if the island in question might not be further away from the UK mainland than the Isle of Wight!

Geoff realised that there were too many islands in the world to enumerate, so he grouped together islands, particularly when they were small. In the IOTA programme numbers are allocated to each group using a continental prefix -- for example, Ireland is EU115 and the Galapagos Islands are SA004. The basic IOTA award requires contacts with 100 islands and groups including at least one from each continent. Entrants can obtain award credit for QSOs made in the RSGB IOTA Contest.

This contest brings together those who like to put islands on the air, those who enjoy contesting, as well as those chasing islands for awards. Please join us for a great weekend!

BY4JN
Lingshan island. China
IOTA AS150

You need a rig that covers the HF bands, and at least one suitable antenna. The contest takes place on five bands – 3.5MHz, 7MHz, 14MHz, 21MHz and 28MHz. Both SSB and CW can be used – you can work stations on both modes (which count separately), so there are ten possibilities for contacting each station. You need to decide which bands to operate on, which may be determined by the antennas you already have or want to put up.

JE6HCL
Tanega Island. Japan
IOTA AS 032

The rules are on http://www.rsgbcc.org/hf/rules/2018/riota.shtml . If you have limited contest experience, you just need to know enough to get started. Everyone sends a signal report, but don't be surprised if you virtually always receive 59 or 599. To save time, HF contesters are in the habit of doing this regardless of the actual signal strength! You also send a serial number, starting at 001, and continuing on regardless of band changes. So, for example, if you change band when you have reached serial number 123, you continue on the next band with 124, and so on.

As you look at the rules, you will see that there are a number of options as far as your entry is concerned. The contest allows both CW and SSB contacts, and entrants can choose whether to use one or the other, or both. There is a category for those who want to operate for 12 hours or for 24 hours – as a newcomer you will probably want to maximise your effort by using the full 24 hours. And you can choose whether to enter with QRP (5 watts), low power (100 watts), or high power (over 100w). This choice will may well be determined by your class of licence, but good advice for those starting on the IOTA contest is to use the highest power that you are permitted, so as to increase your chances of making the QSOs and multipliers needed. When you submit your entry, the "robot" will confirm these choices with you.

The essence of the contest is to work as many island stations as possible. Although you can work any station, island or non-island, contacts with islands score more points, and only new islands count as multipliers. How do you know if a station is on an island? Because after sending the serial number, island stations also send an island reference, but non-island stations don't send any reference.

The reference consists of a continent abbreviation, for example EU for Europe, and a number, allocated by the RSGB IOTA Committee. Stations on the UK mainland are in IOTA reference EU005. Other references can be found @: http://www.rsgbiota.org/info/search.php . So, for example, search for "Wight" and you will see that the IOTA reference for the Isle of Wight is EU120.

RU6DX/P Sudzhuk Island, Russia. IOTA EU185

By the way, you may be asking "What is a multiplier?" When you (or your computer) have added up the score from QSO points, you multiply that by the number of multipliers you have contacted. The IOTA contest rules will give you more details of how this is done. But it's easy to see that it is very important to find and work as many island station multipliers as possible, because your score will receive a big boost. Have a look at the results from previous IOTA contests to see the difference between just making QSOs, and making QSOs which are also multipliers.

On the air: If you are new to international contests, the easiest way to start is with “Search and Pounce”, or S&P. Tune the band in a systematic way, looking for stations you haven’t worked – if you are using logging software, this will tell you immediately if a station is a "dupe". You will not be popular if you often call stations when they know from their log that you have already worked on this band and mode! You will be looking particularly for island stations -- some will be in great demand: if so, note the frequency and move on, coming back later when things are quieter. Otherwise, when they ask for new callers, call just once, using the phonetic alphabet. Be ready to copy down the information sent, and be ready to send your own.

If you miss anything, ask for a repeat before you send any of your own information. When you have everything copied, send your own report and island reference, without unnecessary verbiage.

People usually don't have time for chatting, although you might add a “Good luck Bob”, or other sociable greetings if you know who is operating. But your friend won’t be pleased if you spend so much time on pleasantries that your contest information is lost in QRM! After a dozen or so QSOs, you will get the idea of S&P.

Here's an example. ***You are G9XYZ.***
CR3T: CQ contest, Charlie Romeo three Tango, contest
YOU: Golf nine X-ray Yankee Zulu
CR3T: G9XYZ, 59, 327, Alpha Foxtrot one four
[he sends you serial number 327, and his IOTA reference is Africa 014. Note or remember this information, and transmit as soon as he finishes]
YOU: Roger, 59, zero nine seven, Echo Uniform five
[you send serial number 097, and IOTA reference EU005]
CR3T: Thank you, Charlie Romeo three Tango, contest

So far, so good. Now conditions are poor, and there are requests for repeated information.

K1TTT: .... Kilo one Tango Tango Tango contest
YOU: Golf nine X-ray Yankee Zulu
K1TTT: The golf nine station, again
YOU: G9XYZ, Golf nine X-ray Yankee Zulu, over
K1TTT: G9XYZ, thanks, 59, 1x22
[he sends his serial number, but you miss the second digit. Ask for a repeat before sending your information. He's not on an island, so sends no island reference]

YOU: Number again, please
K1TTT: 1322, 1322, over
[got it this time]
YOU: Roger, 59, two four one, Echo Uniform five
K1TTT: Is that two four one? Over
[if he's got it right, just agree]
YOU: Roger, roger, roger
K1TTT: Good luck, K1TTT, contest

When it is harder to copy information, you might be more repetitious. Follow the example of the station you are working, who may be more experienced.

You might decide you want to call CQ Contest yourself. You can get an idea of how good operators do this by listening to them making these sorts of QSO for a few minutes. Before starting, as at any other time, always check that the frequency isn’t already in use. The rules specify some more limited segments than the whole band, for instance, on 20m -- check first.

Callers will expect you to reply instantly to their calls, and to copy the information without asking for excessive repeats.

Don't be frightened to call CQ, but be aware that even a lowly "G" station can generate a pile-up, with five or six calling people at once – this is mainly because island stations such as those in the British Isles score higher than non-island. Work out in advance how you will deal with this, and listen to what other good operators do.

But also remember that it's often normal to make up to ten CQ calls before getting a reply, sometimes more, even for the best-equipped stations. On a quiet band, you could wait for minutes at a time before getting any callers, although you would also ask yourself if you are really on the right band at all in this case! Many operators now get their computers to perform the job of calling CQ, using MP3 voice files or similar, and CW operators almost always use the computer to send CQs, as well as other contest information.

GM2T
Tree Island.
IOTA EU 008

Which Band?

If you are equipped for several bands, you will need to choose the band to operate on. As a rule, you would use the highest frequency that is open at the time, although this is a very general statement. If you can hear signals on 10m, that is a good place to start, and then look on 15m. However, unless sunspot activity has recently been high, 20m is likely to be the mainstay of contest operation, with 15m also good if conditions are reasonable.

From the UK at present, 20m is likely to be open to Eastern Europe (and further afield) in the mornings. Propagation gradually opens up to the North America from around midday, and tends to die down in the evening. You will probably find Western Europe available most of the day and evening.

If you can only equip yourself for one band, 20m should probably be it. As far as the IOTA Contest is concerned, you might therefore find a mixture of European and US stations on 20m soon after the contest begins. If you stay on the band, you could expect North America to predominate into the evening, always mixed with Europeans. Later on, many stations will move lower in frequency, but it is always worth checking the band just in case. The next morning on 20m will see stations from the East predominating, but you are likely to find Western Europeans on at any time.

If you have an antenna for 40m, you should have no trouble working European stations, including plenty of multipliers, throughout the evening and overnight. If you have 80m, you will find it is also most used once it gets dark, although some stations will frequently be found as early as 1600 or 1700 UTC. There can be high levels of static on 80m, which makes it a harder band to use during the summer.

Have a go and most importantly have fun.

G4ALE/P
Isle of Wight .
IOTA EU 120

a

(Ed. This is probably one of my favourite contests of the year. You do not have to have a massive station to be able to make good number of contacts. If operating from home is not ideal, set-up portable from a great location. Plenty to choose from around here. Maybe next year we could enter a club effort?)

Many thanks to the RSGB and the Contest Committee for putting on a world class contest and allowing us to re-produce this article. It can be found in full at:- http://www.rsgbcc.org/hf/iotahelp.shtml.

Answers to the 'Origins of words' quiz

Quisling: *The name of Major Vidkun Quisling (1887–1945), Norwegian officer, diplomat, and fascist leader, who collaborated with the German forces during their occupation of Norway from 1940 to 1945.*

Mazurka: *A lively country dance in triple time for couples, originating in Poland in the 16th cent., in which the dancers characteristically tap their heels or stamp their feet on the accented beat.*

Ombudsman: *Swedish legal representative or adviser*.

Studio: *Italian room used for studying preliminary sketch or design made to refine detail or in preparation for a larger work of art, artist's workroom.*

Coleslaw: *Dutch koolsla, reduced form of kool-salade.*

Pogrom: *In Russia, Poland, and some other East European countries in the late 19th and early 20th centuries: an organized massacre aimed at the destruction or annihilation of a body or class of people, esp. one conducted against Jewish people.*

Dodo: *Portuguese doudo simpleton, fool, as adj. silly. Applied to an extinct bird, Didus ineptus, belonging to the family Columbidæ, formerly inhabiting the island of Mauritius.*

Semtex: *Commercial name given by manufacturer, probably from the name of Semtín, a village in E. Bohemia, Czech Republic, where it is made.*

Bagel: *Yiddish beygel.*

Guerrilla: *Spanish guerrilla, diminutive of guerra war.*

Magazine: *Various sources, French, Italian, Arabic, Spanish, Portuguese.*

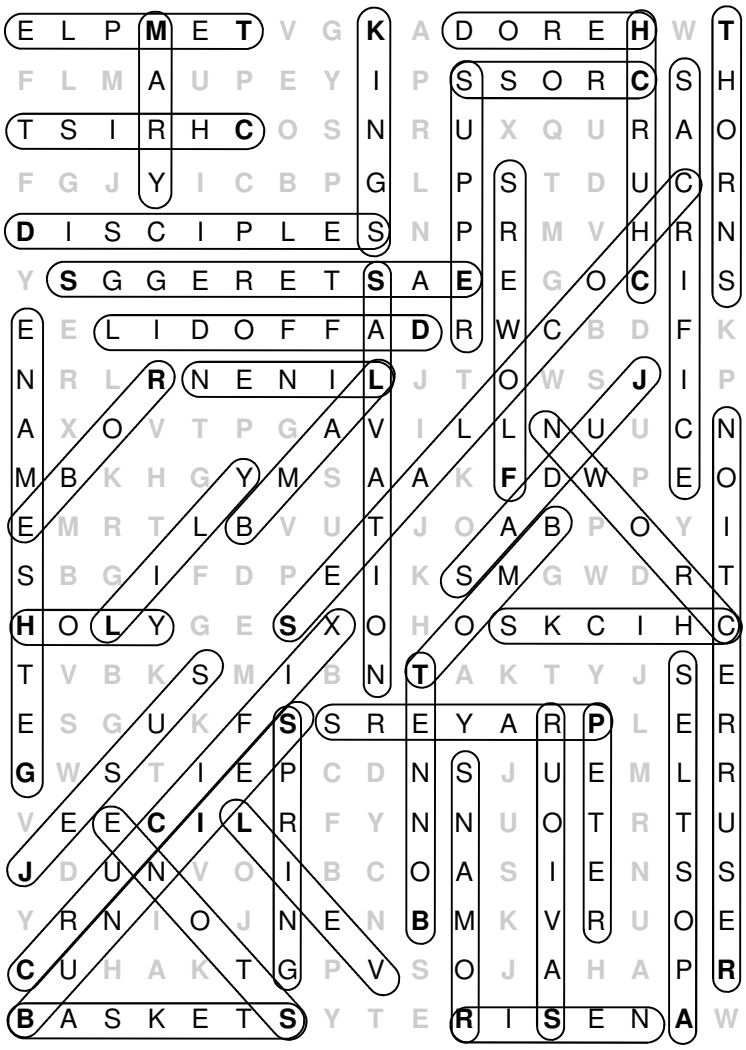
Lieutenant: *French lieutenant, lieu=place + tenant=holding.*

Geyser: *Icelandic Geysir, proper name of a particular hot spring in Iceland; literally 'gusher'; related to geysa, Old Norse gøysa to gush.*

Tycoon: *Japanese taikun great lord or prince, Chinese ta great + kiun prince.*

Admiral: f*rom Anglo-Norman, Old French, Middle French, and post-classical Latin.*

Solution to the Easter Word Search
by Julia G0IUY



Aerials

by Doug G4BEQ

That word brings back a few memories, now it's all change.....Antenna is the "in" word . Antenna to me means those things that stick out from insect/animals head. When did it all change? Must be around the time cycles became hertz.

I have only two radio reference books; the first one is The Radio Amateur's Handbook 12th Edition and printed April 1943. It cost a $1 and was given to me by the Radio Officer on my first ship. The second one is The Amateur Radio Handbook, Third Edition, printed 1961 and cost me 34/-. (For those who are unsure of that symbol it means Shillings.) The reason I mention these two books is that they have chapters on Aerials....not antennas.

The aerial system is without doubt one of the most important units of any radio system. With a well matched aerial low power will give better results than high power and a badly matched one. Some even claim it is equal to improving transmitting power a hundredfold.

Before downsizing to my present QTH I mainly used low power. With 5 watts and a perfectly matched aerial, (it took a lot of time and effort to achieve this) I could work the States on a regular basis to the West; my best effort to the East was Bahrain (A9) and Ghana (9G) to the South. Nothing much to the North but I did make Iceland (TF).

The trouble for most of us we do not have the space around us to achieve the perfect aerial system. My idea of a perfect garden is one that is 180 feet long and 2 feet wide, completely paved. No grass to cut. As far as I am concerned any "garden" larger than a window box is farming, and I do not have the qualifications to undertake that.

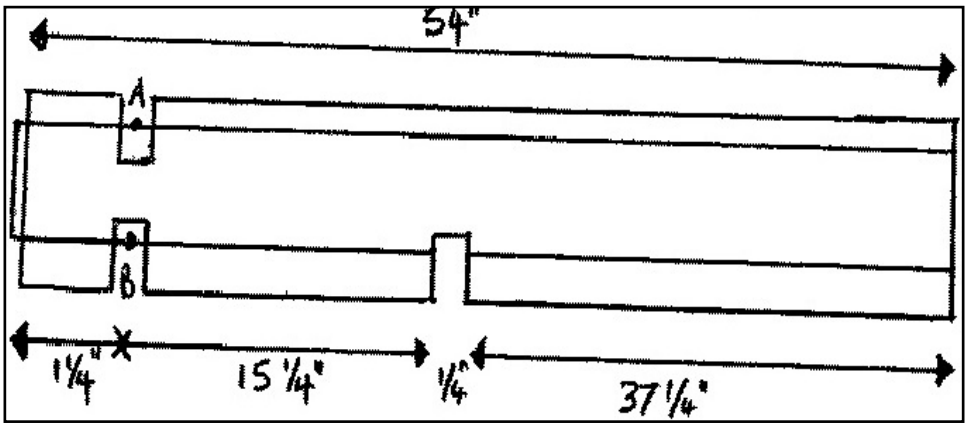
When I moved into a flat some 10 years ago, luxury flat according to the agent, how they play with words, it had many advantages: security, superb view, no gardening, no maintenance plus a Pharmacy and Surgery in the same complex.
It looked a good deal, as I had now reached 80 turns on the coil and also my wife's health was deteriorating. The one big disadvantage was I could not install any aerials which meant I could only operate by going mobile. Later this problem was overcome when I got to know my neighbour who allowed me to attach a wire to his balcony some 20 feet away. I convinced the managing agent that this wire deterred the pigeons from nesting on the balcony.

There was quite a pigeon problem at that time. I could operate on my favourite band 20mtrs. Indoor aerials were out, as the building is an absolute Faraday cage. I could operate 2 mtrs as my good friend, Brian. G3WJM gave me a rather neat rollup ribbon aerial he had purchased in the States.

This meant I could still join in the early morning sked with him and the rest of the gang. By throwing it out of the window each morning I am up and running. Now, some 10 years later it is showing signs of wear and tear so I have made up a "Chinese" copy to replace it. It is basically a half wave aerial and therefore it does not need radials or ground. It is ideal for portable use and will greatly improve the performance of a hand held over the rubber duck, plus it is easy to stow away.

This is an ideal aerial for anyone who travels a lot or goes portable, or like me, lives in a modern flat.
Here's how I made it: I obtain a 55" piece of flat twin lead. Mine was from an old discarded G5RV antenna.

1) Strip back from one end about 3/16" and bare both wires, solder them together keeping the joint as short as possible.
2) Measure up on both sides 1 1/4" and remove insulation but take care not to damage the wire. Keep the removal of insulation to a minimum.
3) Attach a 4 foot length of coax, the inner to point A and outer to point B.
4) On the screen side of the coax measure up 15 1/4" make a ¼"cut in the braid and wire. Make sure you only cut the wire on that side.
5) Now measure from the bottom to the top and trim the tape to an overall length of 54".
6) Hang the antenna up and checked the SWR. It read 1:2:6 which was a little high. I actually chucked mine out of the window. By moving the coax soldered joint about the width of the inner connection wire further down the flat braid wire and reconnecting it dropped to 1:1:5. Keep any movement you do make to this joint as small as possible.
7) Finally, tape up all your joints and the coax to the ribbon making all watertight. You will now have a neat rollup antenna which is ideal for portable operation and takes up very little room.



Horndean & District A.R.C Information.

Club Call signs ***G4FBS (Held by MØKTT); G6RST (Held by G4WQZ)***

Club Website **http://www.hdarc.co.uk**
(Maintained by Neil 2E0LNX)

Club Groups.io site https://hdarc.groups.io/g/main *Administrator is Stuart GØFYX*

Club Meetings *Held at Deverell Hall, 84 London Rd, Purbrook, Waterlooville, Hants. PO7 5JU, on the 1st and 3rd Friday of each month. Commencing at 1930.*

Club Nets ***All times are local and frequencies plus/minus QRM.***

Sunday *0900 CW until about 0930 then SSB on 1950 kHz.*
Net controller:- Stuart GØFYX

2000 FM 433.450 MHz
Net controller:- John G4WQZ

Monday *1930 SSB 1950kHz*
Net controller:- Stuart GØFYX

Wednesday *1930 FM 145.375 MHz*
Net controller:- John G4WQZ

Club Membership

Joining fee £2 . Annual fee £26. Those aged 10-18 pay half this rate, and under 10's have free junior membership. For Europe and rest of the World fees please contact the Membership Secretary. All annual fees payable on November 1st. If fees not paid by the following January 31st, membership is ended.

Club Awards

Full details from Stuart GØFYX (details on committee page).

CLUB NEWS/DIARY Compiled by Stuart GØFYX

News of club members

The committee send our grateful thanks to Sean MØXAN who edited 48 issues of the club journal, and who has now handed over the job to Mike MØZDZ. Sean did a great job, and maintained the high profile of the journal.

Congratulations to Liam 2EØWYY, who won the Club Skittles event at the Southwick Park Golf Club on April 27th., and becomes the Club Champion for 2018. He was presented with the trophy at the event, and also receives a commemorative certificate.

We congratulate, and send our best wishes, to Club President Doug G4BEQ, who celebrates his 90th birthday on May 20th.

Diary

Friday June 1st Natter night/Social evening
Friday June 15th Natter night/Social evening
Sat/Sun June 16th/17th Club will be operating GB1WWM from the World War One Remembrance Museum, at Hilsea (PO3 5PJ).
Sat/Sun June 23rd/24th Club will be operating GB2RAM from the Royal Armouries Museum at Fort Nelson.
Friday July 6th Natter night/Social evening
Friday July 20th Natter night/Social evening
Sat/Sun July 28th/29th IOTA contest from 1200-1200.

This 'n' that

The RSGB Club Championship series of 80m contests continues until the end of July. Dates are: June 4th, Data, CW on the 13th, and SSB on the 28th. July dates are: CW on the 2nd, SSB on the 11th, and Data on the 26th. Would be nice to see more members taking part, especially for the Data sessions. Full rules can be found at: http://www.rsgbcc.org/hf/rules/2018/r80mcc.shtml

A reminder that the Club Project for 2017-8 is 'Build an antenna for any band you like'. You'll need to demonstrate that it works. Entries should be notified to the committee well before September 30th 2018, and the winner will be announced at the club AGM in October 2018. They will receive the Sid Jenkins Memorial Trophy to be retained for a year, and also receive a winners certificate.

Advance notice that we will be running another special event on September 22nd and 23rd from Medstead and Four Marks Station on the Watercress Line, using the callsign GB4MHR (Mid-Hants Railway).

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